

Work Order ID 68516

Thursday, April 14, 2011 11:47:31 AM



Page 1

Item ID: D4380-13
Revision ID: PRELIM
Item Name: Panel, RH Oxygen and Oxy Minder
Start Date: 4/14/2011 Start Qty: 1.00
Required Date: 4/15/2011 Req'd Qty: 1.00
Reference:

Accept



Setup Start



Stop



Cust Item ID:
Customer:

PRELIMINARY ISSUE

Run Start



Stop



Approvals: Process Plan: MF Date: 11-04-14 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr								
D4380	PA9 A								

100 0.00



HandThermo

Memo

0.00

Hand Finishing Thermoforming

1-Cut Sheet to required Blank size

x1

Dh
11/04/14
PTO →

105 0.00



HandThermo

Dry Material

Memo

0.00

Hand Finishing Thermoforming

Dry Sheet as per QSI022 Kydex

Temp: 150°F

Time IN: 4:30 pm 11/04/14

Time OUT: 2:00 am 11/04/15

x1

Dh
11/04/15

Dart Aerospace Ltd

W/O: 68516		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
11/04/14	100	Use .125" Kydex instead of 0.080" to maintain thickness in deep draw area	John	11/04/14		WJP 11/05/13	

Part No: D4380-13 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Setup Start

Stop

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

Cust Item ID:

[illegible]

Customer:

Reference:

Run Start

Stop

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Insp. Stamp

0.00

...the ...

0.00

Thermoform

Thermoforming Machine

Memo

1-Machine Set-Up
2-Pre-heat Tool to required temp.
3-Thermoform as per Dwg and Folio #FTA116 using tool DT9741

Dwg Rev: PA9

Folio Rev: 2

0.00

[illegible]

QC2- Inspect parts off machine FAI/FAIB

0.00

OC

Quality Control

Memo

Visually inspect part for proper formation and texture

0.00

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

QC8- Inspect parts - second check

0.00

OC

Quality Control

Memo OL / per PA 9

2104.15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D4380-13 PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: [Signature] Date: 11/04/15

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR: <u>68516</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
11/04/15	120	One part pulled. too hot. Should mark showing through	[Signature] Prelim	Scrap & Replace. Pull part slightly cooler.	Sh. 11/04/15	W	[Signature] Prelim	[Signature] 11/04/15

NOTE: Date & initial all entries

Work Order ID 68516

Thursday, April 14, 2011 11:47:31 AM



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Item ID: D4380-13

Accept



Setup Start



Revision ID: PRELIM

Stop



Item Name: Panel, RH Oxygen and Oxy Minder

Start Date: 4/14/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 4/15/2011 Req'd Qty: 1.00

Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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140

0.00



HandThermo

Memo

0.00

Hand Finishing Thermoforming

1-Trim to finished dimensions as per Dwg

DL
11/04/15

150

0.00



QC

Memo

0.00

Quality Control

Complete FAI document

DL
11/04/15

160

0.00



QC

Memo

1 Per PA9

0.00

Quality Control

7/11/04/15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 68516

Thursday, April 14, 2011 11:47:31 AM



Page 4

Item ID: D4380-13

Accept



Setup Start



Revision ID: PRELIM

Stop



Item Name: Panel, RH Oxygen and Oxy Minder

Start Date: 4/14/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 4/15/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

170

Identify as per dwg & Stock Location: RAH

0.00



Packaging

Memo

0.00

Packaging

4/14/11

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

4/15/11

POSITIVE RECALL

EFFECTIVE

AUTH

RELEASED

DATE

4/14/11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, April 14, 2011 11:47:26 AM

Page 1

Work Order ID: 68516

Parent Item: D4380-13

Parent Item Name: Panel, RH Oxygen and Oxy Minder

Start Date: 4/14/2011

Required Date: 4/15/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: Rev. A New Issue, 11/04/04 DL verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MKYD100S.080-P1- 52114		Purchased	No			100	sf	15.3625	6.9375	6.9375			



Kydex 100.080



Location

Loc Qty

Loc Code

therm

15.3625

116510

15.3625

125" thick
ATTACHED
E.M.N.L.

DL
11/4/15

MKYD61853.125-P3-62015 M110426 ————— 13.875 sq ft.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order: 68516
Description: Panel, RH Oxygen 2000 Mincler.	Part Number: 04380-13
Inspection Dwg: 04380 Rev: PA9	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST
THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than <u>1/4"</u>	✓			
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			minor flange deviation: not 100% flat but acceptable per fit.

Measured by: Dhe Date: 11/04/15

TRIMMING SECTION

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
15.4"	± 0.100	15.375"	✓		Tape DL-01	
13.75"	± 0.100	13.625"	✓		Tape DL-01	see attached.
11.75"	± 0.100	11.625"	✓		Tape DL-01	
3.0"	± 0.100	2.92"	✓		Tape DL-01	
4.5"	± 0.100	4.375"	✓		Tape DL-01	
4.5"	± 0.100	4.5"	✓		Tape DL-01	
3.1"	± 0.100	3.0"	✓		Tape DL-01	

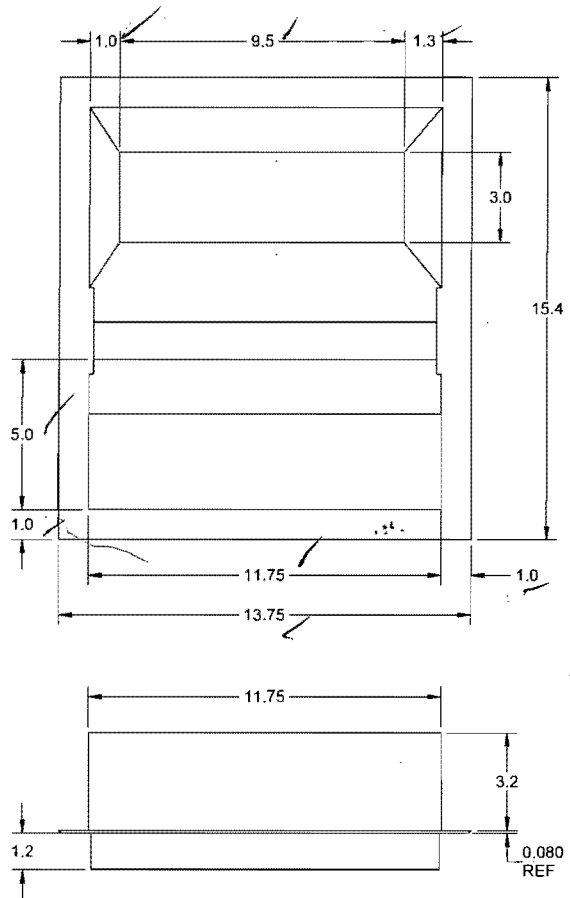
Measured by: Dhe Date: 11/04/15

Audited by: per PA Date: 11-04-15

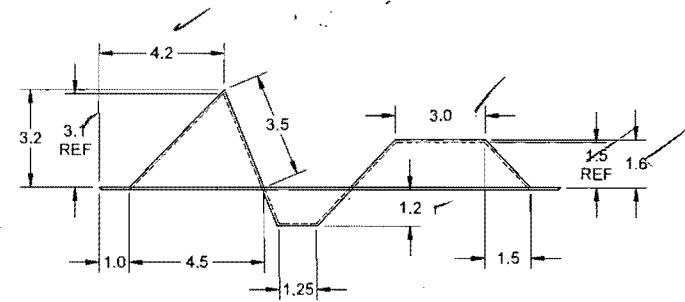
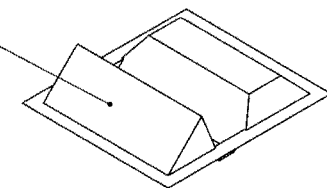
Preliminary Approval: _____ Date: _____

Rev	Date	Change	Revised by	Approved
B	10.04.14	Added preliminary approval	KJ	

10-04-14



TEXTURED SIDE
ON REVERSE



D4380-13 PANEL, RH OXYGEN AND OXY MINDER

- NOTES:**
- 1) MATERIAL: KYDEX 6185/0.080 THICK, P3-VELOUR MATTE, IVORY #62015
REF DART SPEC MKYD6185S.080-P3-62015
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
 - 7) WEIGHT: 1.21 lbs
 - 8) MINIMUM ALLOWABLE THICKNESS AFTER THERMOFORMING = 0.040
 - 9) TOOLING: THERMOFORM -13 PART PER MOULD DT9741.
TRIM PER MOULD LEAVING FINISHED EDGE.

PRELIMINARY ISSUE
11.04.05

DESIGN	DL	DART AEROSPACE LTD	
DRAWN	DL	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. PA9
MFG. APPR.		D4380	SHEET 7 OF 19
APPROVED		TITLE	SCALE
DE APPR.		CEILING POCKETS	NTS
DATE	11.04.05	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

Daryl Leger

From: Daniel Campbell <dcampbell@dartaero.com>
Sent: Monday, April 04, 2011 9:16 AM
To: 'Daryl Leger'
Cc: 'JEANLUC MENARD'; Bill Beckett; 'Linda Lacelle'; 'Harvey Siemens'; 'Mike Petsche'
Subject: D4323 & D4380 - Parts can be untrimmed

To Whom It May Concern,

The parts with p/n's D4323-XX and D4380-XX can be shipped to Calgary untrimmed, or even slightly out of spec in order to get parts here asap so they can be installed on the Westpac machine.

Thanks,

Daniel Campbell
Mechanical Engineer
DART Aerospace Ltd.

P: 403-717-0325
F: 403-717-1288
E: dcampbell@dartaero.com
W: www.dartaero.com
M: 1060 McTavish Road, NE, Calgary, Alberta, T2E 7G6

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Daryl Leger

From: Daniel Campbell <dcampbell@dartaero.com>
Sent: Friday, April 15, 2011 10:31 AM
To: 'Daryl Leger'
Cc: 'Harvey Siemens'; 'Brad Jones'
Subject: D4323-13 Panel, RH Oxygen & Oxy Minder Dims

Hi Daryl,

As per our phone conversation, please ship the -13 panel even though the dims are slightly out of tolerances as per the dwg.

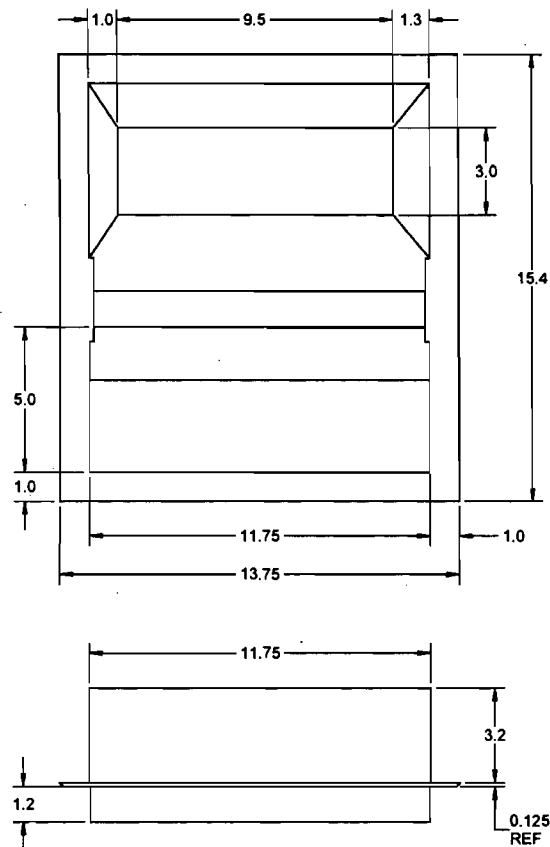
This is due to the fact that the part was made with a larger thickness (0.125" vs. 0.080").

Cheers,

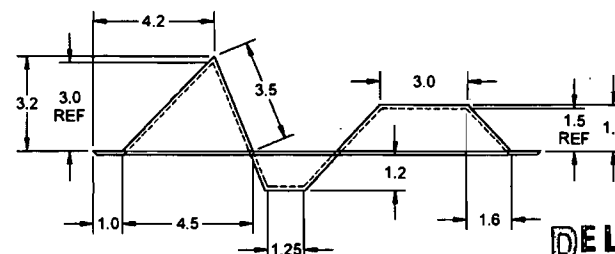
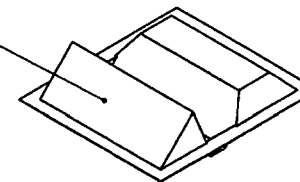
Daniel Campbell
Mechanical Engineer
DART Aerospace Ltd.

P: 403-717-0325
F: 403-717-1288
E: dcampbell@dartaero.com
W: www.dartaero.com
M: 1060 McTavish Road, NE, Calgary, Alberta, T2E 7G6

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TEXTURED SIDE
ON REVERSE



D4380-13 PANEL, RH OXYGEN AND OXY MINDER

NOTES:

- 1) MATERIAL: KYDEX 6185, 0.125 THICK, P3-VELOUR MATTE, IVORY #62015
REF DART SPEC MKYD6185S.125-P3-62015
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.4
- 7) WEIGHT: 1.89 lbs
- 8) MINIMUM ALLOWABLE THICKNESS AFTER THERMOFORMING = 0.040
- 9) TOOLING: THERMOFORM PER MOULD DT9741 AND DART QSI 022
- 10) TRIM PER MOULD LEAVING FINISHED EDGE
- 11) MAXIMUM INSIDE RADIUS = 0.188

RELEASED
2011-05-10

DESIGN	DC	DART AEROSPACE LTD	
DRAWN	DC	HAWKESBURY, ONTARIO, CANADA	
CHECKED	DC	DRAWING NO.	REV. A
MFG. APPR.	DC	D4380	SHEET 7 OF 19
APPROVED	DC	TITLE	SCALE
DE APPR.	DC	CEILING POCKETS	NTS
DATE	11.04.21	COPYRIGHT © 2011 BY DART AEROSPACE LTD	
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